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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/004,221

10/26/2001

Keiji Nakagawa

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05/03/2004

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EXAMINER

LOPEZ, FRANK D

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 05/03/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/004,221

Applicant(s)

NAKAGAWA ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 13 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 18.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Amendment

Applicant's arguments filed February 20, 2004, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 2 and 13 have been considered but are deemed to be moot in view of the new grounds of rejection.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 2 and 13 are rejected under 35 U.S.C. § 103 as being unpatentable over Applicant's admitted prior art in view of Injection Moulding Design, German 3932248 and Japan 61-73465. Applicant's admitted prior art discloses a master cylinder including a resin piston, wherein the piston comprises a concavity (31) communicating with a through hole (32) by a communicating hole (33), wherein the piston is injected molded by first and second dies (11, 12) each including a corresponding core (15), with the through hole formed by the corresponding cores; and the concavity and communication hole is formed by a concavity core (13) abutting a flat surface of the corresponding cores (see detail of fig 7); wherein an inner wall surface of the through hole, near the communication hole, has an arcuate surface oriented substantially perpendicular to the longitudinal direction in with the stopper pin travels in operation of the master cylinder; but does not disclose that the concavity core is inserted into an impact hole in the corresponding cores or that the inner wall surface of the through-hole includes a groove having a flat surface.

Injection Moulding Design teaches, for a piece formed by injection molding, using two dies and a core (fig 9.6b), that a tip of the core is inserted into an impact hole of the dies, for the purpose of preventing the core from damage (page 237 paragraph 3).

Since Applicant's admitted prior art and Injection Moulding Design are both from the same field of endeavor, the purpose disclosed by Injection Moulding Design would have been recognized in the pertinent art of Applicant's admitted prior art. It would have been obvious at the time the invention was made to one having ordinary skill in the art to insert a tip of the concavity core of Applicant's admitted prior art into an impact hole in

the corresponding cores, as taught by Injection Moulding Design, for the purpose of preventing the core from damage. The result of inserting the tip of the concavity core into an impact hole in the corresponding cores is a burr projecting out from the communicating hole into the through hole

German 3932248 teaches, for a master cylinder piston including a concavity (42) communicating with a through hole (34) by a communicating hole (48); with an inner wall surface of the through hole, near the communication hole, being oriented substantially perpendicular to the longitudinal direction in with the stopper pin travels in operation of the master cylinder; that the inner wall surface includes a projecting part (upper part of right side of piston 12, in fig 2) and a corresponding groove (lower part of right side of piston 12, in fig 2) for preventing a stopper pin (38) from touching an inner wall surface near a part communicating with the communicating hole.

Since Applicant's admitted prior art and German 3932248 are both from the same field of endeavor, the purpose disclosed by German 3932248 would have been recognized in the pertinent art of Applicant's admitted prior art. It would have been obvious at the time the invention was made to one having ordinary skill in the art to make the inner wall surface of Applicant's admitted prior art with a projecting part and a corresponding groove, as taught by German 3932248, for the purpose of preventing a stopper pin from touching an inner wall surface near a part communicating with the communicating hole.

Japan 61-73465 teaches, for a master cylinder piston including a through hole (8) communicating with a communicating hole (17); with an inner wall surface of the through hole, near the communication hole, being oriented substantially perpendicular to the longitudinal direction in with the stopper pin travels in operation of the master cylinder; that the inner wall surface is flat (e.g. fig 4).

Since the arcuate and flat shapes respectively, of the inner wall surfaces of the Applicant's admitted prior art and Japan 61-73465 are functionally equivalent in the master cylinder art, it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the inner wall surface of Applicant's admitted prior art flat, as taught by Japan 61-73465, as a matter of engineering expediency.

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Conclusion

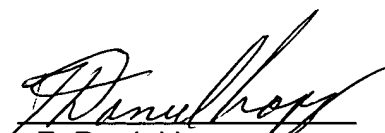
Claim 3 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on February 20, 2004, prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9302. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.


F. Daniel Lopez
Primary Examiner
Art Unit 3745
April 30, 2004